Amendments to the Claims

Please cancel Claims 13-15, 18, 21, 22, 24, 25, 27, 28 and 39 without prejudice to or disclaimer of the subject matter recited therein.

Please amend Claims 16, 19, 37 and 40, and add new Claim 45 to read as follows.

Claims 1-15 (cancelled)

16. (Currently amended) A method for producing a scale for detecting a conveyance rotation angle of a conveying roller provided in ~~a~~ an ink-jet recording apparatus adapted to perform recording on a recording medium conveyed while being held between the conveying roller and a driven roller by using recording means, which forms an image on the recording medium by discharging ink onto the recording medium, the method comprising the steps of:

integrating the conveying roller with a conveyance angle detection pattern writing member coaxially mounted with the conveying roller; and

holding a recording medium conveyance outer peripheral portion of the conveying roller integrated with the conveyance angle detection pattern writing member, and performing rotation angle allotment on the conveyance angle detection pattern writing member to form a scale for detecting the conveyance rotation angle.

17. (Original) A method according to Claim 16, wherein the scale is a magnetic scale formed by magnetically performing conveyance angle allotment.

Claim 18 (cancelled)

19. (Currently amended) A method according to Claim ~~18~~ 16 or 17, wherein the ink-jet recording apparatus is provided with an electrothermal converter for generating energy for discharging the ink.

20. (Original) A method according to Claim 16 or 17, wherein the writing member is integrally provided with a conveying roller drive transmitting means.

Claims 21 and 22 (cancelled)

23. (Original) A method according to Claim 16 or 17, wherein, in the recording apparatus, a detecting device for detecting angle information provided on the scale is provided so as to be of the same phase as the driven roller with respect to the axis of the conveyance outer peripheral portion of the conveying roller.

Claims 24 and 25 (cancelled)

[redacted]

26. (Original) A method according to Claim 16 or 17, wherein, in the recording apparatus, a detecting device for detecting angle information provided on the scale is elastically biased against the scale and arranged so as to be at a fixed distance from the recording means with respect to the recording medium conveying direction.

Claims 27-36 (cancelled)

37. (Currently amended) ~~A~~ An ink-jet recording apparatus comprising conveying means having a conveying roller and a pinch roller in close contact with said conveying roller, and detecting means for detecting a rotational angle of said conveying means, wherein a recording medium conveyed by said conveying means is recorded by recording means for discharging ink on the recording medium to form an image, said recording apparatus being manufactured by the steps of:

integrating the conveying roller with a conveyance angle detection pattern writing member coaxially mounted with the conveying roller; and

holding a recording medium conveyance outer peripheral portion of the conveying roller integrated with the conveyance angle detection pattern writing member, and performing rotation angle allotment on the conveyance angle detection pattern writing member to form a scale for detecting the conveyance rotation angle.

38. (Previously presented) A recording apparatus according to claim 37, wherein said detecting means is biased to a magnetic scale of said conveying means to maintain a distance to said conveying means constant.

Claim 39 (cancelled)

40. (Currently amended) A recording apparatus according to claim ~~39~~ 37 or 38, wherein said ~~ink jet~~ recording ~~apparatus~~ means comprises an electrothermal converting member for generating energy utilized to discharge the ink.

Claims 41-44 (cancelled)

45. (New) A method for producing a scale for detecting a conveyance rotation angle of a conveying roller provided in a recording apparatus adapted to perform recording on a recording medium conveyed while being held between the conveying roller and a pinch roller by using recording means which forms an image on the recording medium by discharging ink on the recording medium, the method comprising the steps of:

integrating the conveying roller with a scale member coaxially mounted with the conveying roller; and

holding an outer peripheral portion of the conveying roller integrated with the scale member, and performing rotation angle allotment on the scale member to form a scale for detecting the conveyance rotation angle.